DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

GUYANA

HEALTH SECTOR PROGRAM

(GY-0077)

LOAN PROPOSAL

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ANNEXES

BASIC SOCIOECONOMIC DATA

The basic socioeconomic data for Guyana available on the Internet at the following address:

http://www.iadb.org/RES/index.cfm?fuseaction=externallinks.countrydata

INFORMATION AVAILABLE IN THE FILES OF RE3/SO3

PREPARATION:

National Health Plan 2003-2007. Ministry of Health, Georgetown, Guyana 2003.

Health Services Strategy. National Health Plan 2003-2007, Technical Annex 2. Ministry of Health, Guyana, Georgetown, 2003.

Workforce Development Strategy. National Health Plan 2003-2007, Technical Annex 3. Ministry of Health, Georgetown, Guyana 2003

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Health Need Assessment: Major Health Needs for Primary Care in Guyana. Institute for Health Sector Development, London, March 2002.

Organizational Development of the Ministry of Health. Proposed Organizational Structure. Final Report prepared by Una M. Paul (Consultant). December 2003.

Regional Health Authority Structure. Final Report prepared by M.H. Monplaisier (Consultant). January 2004.

Strengthening of the Pharmaceutical System. Final Report prepared by Enrique C. Seoane (Consultant). January 2004.

Enterprise Architecture – Migration/Implementation Plan. Final Report prepared by Claudio Peri (Consultant). February 2004.

Physical Prioritization Plan. Functional Program Consultancy. Prepared by Donald Ardiel, Brad Keeler and Mike Ross (Consultants). Final Report March 2004.

EXECUTION:

Operational Manual

Rationalization of Health Service Study. Prepared by Donald Ardiel, Brad Keeler and Mike Ross (Consultants). March 2004.

Georgetown Public Hospital Corporation, Inpatient Facility Redevelopment Project-Functional Plan. Final Draft. Prepared by Donald Ardiel, Brad Keeler and Mike Ross (Consultants). March 2004.

McKenzie Regional Hospital. Redevelopment Project-Functional Plan. Final Draft. Prepared by Donald Ardiel, Brad Keeler and Mike Ross (Consultants). March 2004.

Health Management Committee Region 6, Regional Health Plan 2004-2008. Final Draft. Prepared by Dr. Francisco Xavier Solórzano (Consultants). February 2004.

ABBREVIATIONS

BEAMS	Basic Education, Access, Management Support
CFNI	Caribbean Food and Nutrition Institute
CHW	Community Health Workers
CIDA	Canadian International Development Agency
CMO	Chief Medical Officer
COF/CGY	Country Office in Guyana
DCA	Drug Control Authority
E-HIPC	Enhanced HIPC
EU	European Union
FDD	Food and Drugs Department
FSO	Fund for Special Operations
GDP	Gross Domestic Product
GFATM	Global Fund for AIDS, Tuberculosis and Malaria
GOG	Government of Guyana
GPH	Georgetown Public Hospital
GPHC	Georgetown Public Hospital Corporation
HIPC	Heavily Indebted Poor Countries
HMC	Health Management Committee
HMIS	Health Management Information System
HSDU	Health Sector Development Unit
IDA	International Dispensary Association
IDB	Inter-American Development Bank
IMCI	Integrated Management of childhood illness
IMF	International Monetary Fund
JDCA	Japan Development Corporation Agency
MCH	Maternal and Child Health
MEDEX	Medical Auxiliaries
MICS	Multiple Indicator Cluster Survey
MMU	Materials Management Unit
MOH	Ministry of Health
MOLG	Ministry of Local Government
NHP	National Health Plan 2003-2007
NPV	Net Present Value
PAHO	Pan American Health Organization
PCOB	Post-Construction Operational Budget
PEU	Project Execution Units
PIU	Project Implementation Unit
PMIS	Project Management Information System
PNC	Project Management Council
PPEF	Project Preparation and Execution Facility
PPP	Purchasing Power Parity
PRGF	Poverty Reduction Growth Facility
PRSP	Poverty Reduction Strategy Paper

PSC	Public Sector Commission
PTI	Poverty Targeted Investment
RDC	Regional Democratic Council
RMMS	Routine Maintenance Management System
SEQ	Social Equity Enhancing
SIMAP	Social Impact Amelioration Program
TB	Tuberculosis
TC	Technical Cooperation
TCU	Technical Coordination Unit
UK	United Kingdom
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USA	United States of America
USAID	US Agency for International Development
WB	World Bank
WTO	World Trade Organization
USAID	US Agency for International Development
WB	World Bank
WTO	World Trade Organization

Inter-American Development Bank
Regional Operations Support Office
Operational Information Unit

Guyana

Tentative Lending Program

2004

Project Number	Project Name	IDB US$ Millions	Status
GY0053	Fiscal and Financial Management Program	28.0	
GY0077	Health Sector Program	23.0	
GY0011	Agricultural Support Services	20.0	
GY0076	Moleson Creek-New Amsterdam Road	37.3	
*GY1002	Trans World Telecom Guyana	18.0	
GY0055	Georgetown Solid Waste Management	9.5	
GY0073	Public Management Modernization Program	5.0	
	Total - A : 7 Projects	**140.8**	
GY0066	Information & Communications Technology	21.3	
GY0071	Citizen Security Program	7.0	
	Total - B : 2 Projects	**28.3**	
	TOTAL 2004 : 9 Projects	**169.1**	

2005

Project Number	Project Name	IDB US$ Millions	Status
GY0075	Timehri Bypass Road	40.0	
GY0074	Rural Roads Program	20.0	
	Total - A : 2 Projects	**60.0**	
	TOTAL - 2005 : 2 Projects	**60.0**	
	Total Private Sector 2004 - 2005	**18.0**	
	Total Regular Program 2004 - 2005	**211.1**	

*** Private Sector Project**

INTERAMERICAN DEVELOPMENT BANK
ITS/ITC

GUYANA

IDB LOANS

APPROVED AS OF MARCH 31, 2004

	US$Thousand	Percent
TOTAL APPROVED	**844,692**	
DISBURSED	648,524	76.77 %
UNDISBURSED BALANCE	196,169	23.22 %
CANCELATIONS	41,405	4.90 %
PRINCIPAL COLLECTED	234,007	27.70 %
APPROVED BY FUND		
ORDINARY CAPITAL	117,415	13.90 %
FUND FOR SPECIAL OPERATIONS	720,343	85.27 %
OTHER FUNDS	6,934	0.82 %
OUSTANDING DEBT BALANCE	**414,517**	
ORDINARY CAPITAL	18,512	4.46 %
FUND FOR SPECIAL OPERATIONS	396,005	95.53 %
OTHER FUNDS	0	0.00 %
APPROVED BY SECTOR		
AGRICULTURE AND FISHERY	253,307	29.98 %
INDUSTRY, TOURISM, SCIENCE AND TECHNOLOGY	38,571	4.56 %
ENERGY	106,771	12.64 %
TRANSPORTATION AND COMMUNICATIONS	128,813	15.24 %
EDUCATION	93,380	11.05 %
HEALTH AND SANITATION	80,828	9.56 %
ENVIRONMENT	900	0.10 %
URBAN DEVELOPMENT	48,667	5.76 %
SOCIAL INVESTMENT AND MICROENTERPRISE	51,384	6.08 %
REFORM AND PUBLIC SECTOR MODERNIZATION	41,136	4.86 %
EXPORT FINANCING	934	0.11 %
PREINVESTMENT AND OTHER	0	0.00 %

* Net of cancellations with monetary adjustments and export financing loan collections.

INTERAMERICAN DEVELOPMENT BANK
ITS/ITC

GUYANA

STATUS OF LOANS IN EXECUTION

AS OF MARCH 31, 2004

(Amount in US$ thousands)

APPROVAL PERIOD	NUMBER OF PROYECTS	AMOUNT APPROVED*	AMOUNT DISBURSED	% DISBURSED
REGULAR PROGRAM				
Before 1998	**2**	**45,100**	**22,641**	**50.20 %**
1998 - 1999	**5**	**104,000**	**36,999**	**35.58 %**
2000 - 2001	**3**	**53,900**	**13,012**	**24.14 %**
2002 - 2003	**4**	**65,850**	**1,748**	**2.65 %**
TOTAL	**14**	**$268,850**	**$74,400**	**27.67 %**

* Net of cancellations. Excludes export financing loans.

HEALTH SECTOR PROGRAM

(GY-0077)

EXECUTIVE SUMMARY

Borrower:	Cooperative Republic of Guyana		
Executing agency:	Ministry of Health		
Amount and source:	IDB: (FSO)	US$	23,000,000
	Local:	US$	2,555,000
	Total:	US$	25,555,000
Financial terms and conditions:	Amortization Period:	40	years
	Grace Period:	10	years
	Disbursement Period	minimum 3	years
		maximum 5.5	years
	Interest Rate:	1%	grace period
		2%	thereafter
	Supervision and Inspection:	1	%
	Credit Fee:	0.5	%
	Currency:	US$	

Objectives: The goal of the project is to improve the effectiveness, quality and equity in access to health services in Guyana. Program objectives include improving the organizational and institutional capacity of the health sector, and of the health services delivery system.

Description: The proposed Program will finance activities in two components: (i) organization development and institutional capacity improvement; and (ii) health service delivery improvement.

Component 1 will support investments to improve the health legislation and regulatory framework; technical assistance to enhance the institutional and managerial capacity of both the Ministry of Health (MOH) and the decentralized entities, and to support the organizational changes in the health system; support community and user involvement in monitoring the quality of health care provided. The component will address human resource constraints in the health sector: develop the workforce planning capacity of the sector; modernize the recruitment process;

modernize and expand the training programs for primary care workers; establish innovative and financially sustainable programs to attract and retain human resources particularly in rural areas and enhance productivity in the provision of primary health services. Component 1 will also finance key IT investments in the health sector and improvement in the national pharmaceutical system in order to expand access to quality essential drugs, vaccines and other health care supplies.

Loan resources under Component 2 will finance civil works, goods and services related to the final design using the Project Preparation and Execution Facility (PPEF) (see ¶3.28), construction, supervision, furnishing, equipping and rehabilitation of priority health facilities.

Bank's country and sector strategy:

The IDB is the single largest donor under the Heavily Indebted Poor Countries (HIPC) Initiative, the largest creditor with operations spanning most sectors, and the largest provider of technical assistance and policy advices.

The Bank's strategy for Guyana (GN-2228-1) seeks to reduce its level of poverty in the medium term, while simultaneously addressing chronic institutional and human resource problems by providing selective assistance in three areas of development challenges confronting the country: (i) achieving sustainable economic growth; (ii) improving governance and public sector efficiency; and (iii) strengthening social programs. The proposed operation will contribute to improving the governance and efficiency of the public health sector and strengthening the provision of health services. It is also envisaged that the Program will assist with sustainable economic growth through an improved investment in human capital (see ¶1.41-1.42).

The proposed operation will contribute to the first objective of the Bank's Social Development Strategy (GN-2241-1), by supporting a health reform process that aims to make a better use of public resources allocated to the health sector (see ¶1.43).

Coordination with other Multilateral Agencies

During the preparation of the Program, the Bank's project team held working sessions with the international agencies involved in the health sector (see ¶1.48).

Environmental/ social review:

The Program will finance the replacement of old and inadequate facilities and equipment with more modern and efficient ones. Potential hazards are considered minor and predictable. To further mitigate risks, the design will consider cost-effective actions directed to improve safety, energy conservation and waste management (including hazardous/toxic solid wastes, biological

wastes, and domestic sewage). In accordance with the norms and procedures, construction permits will be granted on the basis of environmental management plans. Mandatory application of standard measures in project engineering will be specified in the bidding documents. Thus, no negative environmental impacts are expected (see ¶4.14).

Benefits:

The operation builds upon extensive national consultation undertaken by MOH as part of the development of its National Health Plan. The Program will improve access to primary and preventive health care, which is an established cost-effective strategy to improve population health, particularly in the context of limited financial and human resources. The investments directed to the rehabilitation of health facilities were selected through a comprehensive prioritization and rationalization plan, which involved all the relevant stakeholders and identified the optimal level of sustainable investment required. The Program emphasis on social equity will benefit all segments of the population, notably the poor who are the predominant user of the public health system (see ¶4.4-4.7).

Risks:

The *Ministry of Health Act* and *Regional Health Authorities Act* and their regulations will define the duties, powers and authorities of the agents responsible for the governance and delivery of health. The two acts have been already drafted and discussed in the relevant Cabinet subcommittee, but have not yet been enacted by the Parliament. To mitigate such a risk, the Government of Guyana (GOG) agreed to include as condition prior to loan first disbursement the enactment of the two pieces of legislation (see ¶4.15).

Critical to strengthening the health sector is GOG's ability to attract and retain qualified human resources. The Program will inform this process through: (i) the ongoing monitoring of health sector workers supply/demand; (ii) an increased focus on primary care workers training and development; and (iii) the establishment of a sustainable program and incentives to attract and retain human resources in the health sector, particularly in rural areas (see ¶4.16).

Previous IDB financed health sector reform projects in the Region show that the execution of institutional strengthening activities and reforms implementation (i.e. Components 1 of the proposed Program) are often slower than the execution of the infrastructure investments. To mitigate this risk, the GOG has agreed to condition the execution of infrastructure investments to the balanced execution of the two components of the proposed

Program (see ¶4.17,3.23-3.25).

The main Government institutions involved in project activities are weak, and absorptive capacity for new programs and initiatives is low. This situation constrains the execution of the Bank's portfolio, and is reflected in slow compliance with contractual conditions and the need for extensions of project execution and disbursement deadlines. The project will mitigate this factor with focused institutional strengthening directed to transfer of knowledge to the local counterpart in MOH, in order to enhance the health sector's absorptive capacity in the short to medium term. Moreover, the project will seek the introduction of performance based incentives for key staff in the Project Implementation Unit (PIU), which is based on a model being developed by the COF/CGY for use in Bank's programs. Finally, the Country Office in Guyana (COF/CGY) has achieved significant gains in portfolio execution starting in 2003 based on frequent monitoring of project policies, benchmarks and timelines (see ¶4.18).

The execution of Bank projects has traditionally suffered delays because of the procurement system of the country. A new Procurement and Tender Bill, which seeks to better regulate procurement of goods and services and the execution of works, and to promote competition among suppliers and contractors was recently approved by the Parliament and is expected to be fully operational in 2004. To mitigate risks during the transition period, a consultant will be hired to support the PIU in the procurement of goods and services and the acquisition's strategy of the Program has been structured in order to minimize the number of submissions to the Central Tender Board (see ¶4.19).

Special contractual clauses:

Special conditions prior to first disbursement:

a) The *Ministry of Health Act* and the *Regional Health Authority Act* have been enacted (see ¶3.11).

b) The Operating Regulations of the Program has been adopted (see ¶3.15).

c) The Executing Agency has appointed the Project Director and three key staff of the PIU (Financial Manager, Civil Work Manager, and Procurement Officer), according to the terms of references previously agreed with the Bank (see ¶3.10).

d) The Executing Agency has selected and the Central Tender Board has approved the long-term Consultancy Firm contract for the provision of technical assistance under Component 1 (see ¶3.19).

Special conditions prior to committing loan resources for subcomponent Group 2 of Component 2. The Executing Agency will have to present to Bank's satisfaction, evidence that:

a) 50% of Component 1 resources are committed and 20% disbursed (see ¶3.23).

b) The computerized Routine Maintenance Management System (RMMS) for health facility infrastructures and essential medical equipments has been designed and the Ministry of Health approved its implementation (see ¶3.25)

c) The Executing Agency has entered into services agreements with the Health Management Committee (HMC) of Region 6, and the Georgetown Public Hospital Corporation (GPHC); (see ¶3.23).

d) The management team of the HMC in Region 6 has been fully staffed and incorporated in the payroll of the HMC, according to the terms and conditions satisfactory to the Bank (see ¶3.23).

e) The Regulations for the Ministry of Health Act and the Regional Health Authority Act have been enacted. (see ¶3.23).

Poverty-targeting and social equity classification: This operation qualifies as a Social Equity Enhancing project, as described in the indicative targets mandated by the Bank's Eighth Replenishment (document AB-1704). This operation qualifies as Poverty Targeted Investment (PTI) (see ¶4.13).

Exceptions to Bank policy: None

Procurement: The thresholds above which procurement will be subject to international competitive biddings are: above US$200,000 for consulting services; equal or above US$250,000 for goods and related services; and equal or above US$1,000,000 for civil works. Acquisition of consulting services will be subject to the procedure set forth in document GN-2220 – 10 February 2004 (see ¶3.17).

I. FRAME OF REFERENCE

A. Socioeconomic framework

1.1 According to the 1991 census, the total population of Guyana was 723,000. Population growth since then has been marginal due to substantial emigration. The vast majority of the population (around 70%) lives in the coastal strip, with reasonably good road communications. The rural interior or hinterland is very sparsely populated with communication being predominately along waterways, and/or by air and road to the coast. The country is divided into 10 Regional Democratic Councils (RDCs). Regions 1, 7, 8, and 9 are classified as the interior regions - rural and remote, with small dispersed populations. Regions 2, 3, 4, 5, and 6 are the coastal regions, and Region 10 has one moderate sized town and a large rural area. Region 4 includes Georgetown, the capital, and represents the largest concentration of the population.

1.2 Guyana has an ethnically mixed population, with about 48% of East Indian origin, 32% of African origin, and 6% Amerindian. However, there are considerable differences among regions, with Regions 2, 3, 5, and 6 being predominantly Indo-Guyanese, Region 10 Afro-Guyanese, Regions 1, 8 and 9 Amerindian, and Regions 4 and 7 mixed. Guyana has a young age structure with more than 11% of the population under age 5, 35% under age 15 and only 4% over age 65. There is variation from region to region, with the more remote regions (1, 8, 9) having a greater percentage of children. This is probably due to a higher birth rate among Amerindian communities.

1.3 Following independence from the United Kingdom (UK) in 1966, Guyana embarked on a Cooperative Socialism experiment from 1971 to 1989. There was extensive state intervention in the productive sectors, including the large bauxite and sugar industries. Economic growth stalled. By the late 1980s, income per head had fallen to US$350, inflation accelerated eight fold, government debt rose from 30% of GDP to 470%, foreign exchange reserves dwindled and poverty increased. Skilled Guyanese emigrated in large numbers to North America, the UK and in the Caribbean, resulting in an acute weakening of the country's human resource base that continues to have a profound impact on all sectors.

1.4 In 1989, the Government of Guyana (GOG) launched an Economic Recovery Program that was focused on market-oriented stabilization and structural adjustment policies. The economy responded positively to this program during the 90s (real growth was more than 7% per year during the 1991-97 period). However, real GDP growth has since stagnated, growing by only 0.7% on average between 1998-2002. With per capita GDP estimated at around US$975, Guyana is among the poorest countries in the Americas. It was ranked 92nd in the UNDP's 2003 Human Development Index Report, the lowest ranking in the English-speaking Caribbean. A Living Conditions Survey conducted in 1999 indicated that the proportion of the population living below the poverty line was 35%, with

19% living in extreme poverty. This represented a diminution of the poverty gap for the country as a whole between 1993 and 1999, from 16.2 to 12.4 percent.

1.5 Guyana was declared eligible in 1997 for debt relief under the original **Heavily Indebted Poor Countries (HIPC)** initiative, and upon reaching completion point in May 1999, it was granted debt relief totaling US$256 million in net present value (NPV) terms. The enhanced HIPC (E-HIPC) initiative was subsequently announced in May 1999, and following preparation by the authorities of an Interim **Poverty Reduction Strategy Paper (PRSP)**, the E-HIPC decision point was reached in November 2000. A full PRSP was completed in March 2002, and this paved the way for a series of new international agreements in the final months of the year, with a new three-year International Monetary Fund (IMF) Poverty Reduction Growth Facility (PRGF), a new World Bank Country Assistance Program, and a new IDB Country Strategy. Guyana subsequently reached the E-HIPC completion point in December 2003, at which point it qualified for permanent access to debt relief totaling US$335M (NPV), leading to an overall reduction in Guyana's external debt burden of almost one-half.

1.6 The PRSP goals are to: (i) reduce the proportion of the population living under the poverty line to 31.4% by 2005; (ii) reduce infant mortality rates to 42 per thousand by 2005; (iii) achieve universal primary education; and (iv) eliminate gender disparity in education by 2004. To achieve these goals, the strategy seeks to promote (i) broad-based, job-generating economic growth; (ii) environmental protection; (iii) stronger institutions and better governance; (iv) investment in human resources with an emphasis on primary education and health; (v) investment in physical capital with emphasis on better and broader provision of safe water and sanitation services, farm to market roads, drainage and irrigation systems, and housing; (vi) improved safety nets; and (vii) special intervention to address regional pockets of poverty.

1.7 It is worth noting that the public consultations process which accompanied the development of the PRSP highlighted the following priorities for the health sector: (i) improvements in access to quality health services; (ii) increased drug and medical supplies and improvements in related storage facilities; (iii) training, recruitment and retention of qualified health personnel; (iv) reductions in the incidence and prevalence of malnutrition; and (v) increased public education in basic health practices.

B. The health sector

1. Health status

1.8 Guyana's health indicators compare poorly with those of other non-Latin Caribbean countries.[1] The country has the health problems both of a poor tropical

[1] Health Need Assessment: Major Health Needs for Primary Care in Guyana. Institute for Health Sector Development, London, March 2002.

country, and those related to a Westernized diet and lifestyle. This poses particular problems in combating both infectious disease and vascular disease, given the relatively small budget in absolute terms allocated to health.[2] In general, health indicators are poorer in rural areas, especially the interior. However, since population density is very low, it is difficult to make progress in these areas and access to adequate health case has been a challenge.

1.9 The main **causes of death**[3] in children under age 5 are respiratory infections, following the success of the Ministry of Health (MOH) in reducing diarrhea-related morbidity. Perinatal causes and infectious disease, often associated with malnutrition, are also important causes, followed by accidents and injuries. Accidents and injuries are the leading cause in children aged 5-14. In young adults, three causes account for the majority of deaths: HIV/AIDS, suicide, and accidents and injuries. Vascular disorders become the main causes of death in older adults.

1.10 Guyana's performance in regards to **maternal mortality** in last few years has been poor. The national incidence of maternal mortality increased from 150 per 100,000 live births in 1995 to about 170 per 100,000 live births in 2000 (UN, Millennium Indicators), while maternal mortality in non-Latin Caribbean countries is estimated to be 70.7 per 100,000 live births. The percentage of **births attended by skilled health personnel** in Guyana is high, at over 90%, but it is generally accepted that a key problem is the low quality of healthcare received. It is not possible to accurately measure **infant mortality** at present because of inaccurate reporting at the regional level, which has led to estimates ranging from 21.9 (CMO, Annual report, 2000) to 53.9 (MICS Survey, 2000) per 1,000 live births. The estimated average of non-Latin Caribbean countries is around 20 per 1,000 live births. Similarly, estimates of **under five mortality rates** vary from 31.3 (CMO, Annual report, 2000) to 72 (MICS Survey, 2000) per 1,000 live births. The estimated average of non-Latin Caribbean countries is 24 per 1,000 live births. Information on some of these indicators for Guyana, and other Caribbean and HIPC countries is presented in Table I-1.

[2] Total health expenditure per capita in Guyana is estimated as US$180 in purchasing power parity (PPP). The average for non-Latin Caribbean countries is US$357 PPP.

[3] Incomplete registration, together with incomplete transfer of information from the general registration office means that routine data on morbidity and cause of deaths as a whole are not entirely reliable. To some extent, survey data provide a more reliable source of information.

Table I-1. Key MDG Indicators for Caribbean Countries in the Health Sector

Caribbean Countries	Population 2001[4]	Under five mortality rate per 1,000 live births[5]	Infant mortality rate (0-1 year) per 1,000 live births[6]	Adult (15-49) HIV Prevalence Rate[6]	Maternal mortality ratio per 100,000 live births[6]	
		2001	2001	2001	1995	2000
Bahamas	309,840	16	13	3.5	10	60
Barbados	268,190	14	12	1.2	33	95
Belize	247,110	40	34	2.0	140	140
Bolivia	8,515,220	77	60	0.1	550	420
Cuba	11,230,000	9	7	<0.1	24	33
Dominican Republic	8,505,200	47	41	2.5	110	150
Guyana	**766,260**	**72**	**54**	**2.7**	**150**	**170**
Haiti	8,132,000	123	79	6.1	1100	680
Honduras	6,584,730	38	31	1.6	220	110
Jamaica	2,590,000	20	17	1.2	120	87
Nicaragua	5,205,000	43	36	0.2	250	230
Suriname	419,660	32	106	1.2	230	110
Trinidad and Tobago	1,309,610	20	17	2.5	65	160

2. The health system

a) Organizational structure

1.11 Over the last thirty years, the organizational structure of the public health care system of Guyana has become highly decentralized. The MOH has overall responsibility for policy formulation, strategic planning and managing of the health information system, while the 10 RDCs are responsible for health care delivery within their geographical and administrative boundaries. Each RDC has a Regional Health Officer who reports to the Regional Executive Officers, but who receives technical and professional guidance from the MOH. While it meets some of the needs, the current framework does not function effectively and the potential benefits of decentralization have not been realized. Reasons for this include: (i) regions have not been given authority over human resources; (ii) regions receive block budgets (for all sectors) from the Ministry of Local Government (MOLG) and health expenditure has sometimes suffered in favor of other sectors; and (iii) regions have not been able to develop and maintain management capacity at this level sufficient to manage a fully integrated service.

1.12 The division of responsibilities is poorly defined and there is a lack of coordination and accountability between administrative levels. Though regions

[4] Source: World Development Indicators Database. http://devdata.worldbank.org/data-query/
[5] Source: United Nations Statistics Division. Millenniums Indicators. http://millenniumindicators.un.org/unsd/mi/mi_goals.asp.
[6] Source: UNAIDS Epidemiological Fact Sheets, 2002 Updates, for each country.

are responsible for service delivery, critical functions remain centralized at the MOH, including the staffing and management of vertical programs designed to address specific health needs such as communicable disease, STI/HIV/AIDS, family health, chronic and non communicable disease, oral health and environmental health. At the same time, the MOH has only limited input and control over the budget of the RDCs, which is determined by the MOLG, and over the implementation of national policies and the regional level. These problems are compounded by the inadequate capacity of the MOH, which is impacted by limited monitoring capacity, shortages of qualified staff, lack of a modern health and information management system and the use of outdated and ineffective administrative and human resource management practices. Capacity at the regional level is also limited and the lack of capacity is compounded by the fragmentation of administrative functions into 10 RDCs.

1.13 In addition to the public health care system, health care is also provided by a growing private sector, mainly in Regions 4 and 6. For example, an estimated 331 private beds exist in Region 4 and there are approximately 115 doctors that practice almost exclusively in the private sector. Most public sector doctors also have some private practice. The result has been the development of parallel systems where the poor use the public facilities and those who can afford it use the private sector.

b) Human Resources

1.14 Medical services in Guyana are provided by: **Community Health Workers** (CHW)[7] at health posts predominantly in rural areas and through outreach and home visits; **Medexes** (assistant physicians)[8] at health centers and some district hospitals in the coastal and rural interior; and medical doctors at national, regional and district hospitals and in health centers in the urban and coastal regions on a visiting basis.

1.15 The MOH is responsible for the **Schools of Nursing**. An annual intake of student nurses is 28 in each of the three regions, namely Regions 4, 6 and 10. In addition, there is an intake of between 10 and 15 students at the St Joseph's Mercy Hospital (the main private hospital of the country). However, a long-standing problem is the high failure rate in the registered nursing program. Recently, the University of Guyana has launched a fast track B.Sc. in nursing/public health with 12 student places, but some concerns have been expressed regarding the suitability of the

[7] CHWs are selected by their community and sent for a 16-week course at the Faculty of Health Sciences. Their role includes health promotion, first aid, nursing procedures, malaria treatment, and the management of common diseases, acute enteric and respiratory infections and the management of all phases of pregnancy. The CHW can prescribe for common conditions such as acute respiratory infection and malaria.

[8] The Medex program was developed in 1979 by the MOH with support from USAID and technical assistance from the University of Washington, Seattle, which adapted the medical extension or auxiliary model to the Guyanese situation. The rationale was that many of the roles and tasks of doctors could be carried out adequately by a health professional with less than total training.

program for national needs and how the newly graduated nurses would fit in the existing workforce structure.

1.16 The undergraduate **Medical School** of the University of Guyana produces between 10-15 doctors a year (with a failure rate of about 30%) but less than half of these graduates typically remain in Guyana. In addition, about 200 medical scholarships in Cuba are being awarded for 2002-2003, and these doctors are expected back into the system by 2006-2007. No structured postgraduate medical training program has been developed, and thus there is very little incentive for doctors to remain in the country. More than 70% of the specialist staff are expatriates, largely resulting from technical cooperation programs with Cuba, India and China.

1.17 Recruitment of health sector staff is undertaken by the **Public Sector Commission** (PSC), which is responsible for all public sector recruitment with the exception of teachers and police who have their own, separate commissions. The only exception in the health sector is for employees of the Georgetown Public Hospital (GPH) since its recent corporatization. The recruitment process is as follows: (i) the PSC advertise for staff by placing advertisements in the newspapers etc.; (ii) following advertisement, prospective applicants apply for positions and a shortlisting process follows; (iii) shortlisted candidates are called for interview; (iv) the interview panel consists of an independent chairman, a union representative and an opposition member, but does not include any representative from the health sector i.e. the organization that the potential employee will be working in; (v) if candidates are successful, they are appointed to relevant vacancies. Recruitment, promotion and transfer of staff via the PSC is slow and does not support retention, while the body is not seen as receptive to the requirements of the health sector. Moreover, it is not clear whether records are kept at each stage of the process to enable analysis to be undertaken to ensure a fair and transparent process.

1.18 Although public sector staff have demonstrated the ability to learn new skills and adapt to a changing and challenging situation, the absolute shortage of a skilled and experienced workforce remains a major constraint in the health sector. Yet effective human resource planning and management capacity is negligible. Detailed workforce information is not available either on a computer database or in manual form, and there is no statistical information regarding the level of staff turnover or the reasons for this turnover. Key reasons cited for poor staff retention are low pay and a lack of opportunity for promotion and professional development. Career pathways are “blocked” by a lack of ongoing training and development opportunities and in some areas there is no further opportunity for promotion. There is an absolute lack of medical supervision for nurses, Medexes and CHWs. The post basic training needs should be addressed urgently but systematically and linked to clinical governance initiatives, performance management system development at management and individual levels and other general retention initiatives, including revision of pay structures.

1.19 The official human resource management system is far too rigid in relation to the highly mobile work force of the health sector, and current pay system and some terms and conditions of employment do not support appropriate recruitment and retention of health sector workers. As a result, many of these workers migrate, mainly to Canada, the UK, the United States (USA) and other Caribbean countries, the vacancies are not replaced expeditiously, and the limited human resources are spread too thinly in too many health facilities, particularly in the hinterland regions. This shortage however is not only a health sector specific problem, and therefore cannot be addressed in the short term only by increasing the output of newly trained workers. This approach must be combined with appropriate incentives and systems to retain trained workers for longer periods in the health care system.

c) Pharmaceutical

1.20 Access to health care including access to essential drugs, vaccines and other health care supplies[9] is a main goal of the country. The main public agencies responsible for pharmaceutical and medical supplies policy and regulation are:

a. The Drug Control Authority (DCA) has the general function of developing and organizing the national drug policy and the specific functions of pharmacy assistants training, drug information, and estimating drug needs for the MOH;

b. The Food and Drugs Department (FDD) has the responsibility for licensing drug manufacturers and wholesalers, maintaining the drugs and medical devices registry, testing products quality and safety, and market control[10]; and

c. The Materials Management Unit (MMU) is the centralized drug procurement agency for the public sector. The MMU is responsible for a broad range of functions, which include the purchasing, storage and distribution of pharmaceuticals and other health care supplies.[11] The MMU supplied around 50% of the requests for drugs and medical supplies by public health care institutions in 2002.[12]

1.21 In Guyana there are chronic shortages of drugs in the public system and a large part of the population does not have regular access to essential drugs and other

[9] The term "other health care supplies" indicates all goods procured for the provision of health care services including laboratory supplies, blood bank supplies, nutritional supplements and other medical supplies.
[10] See the Food and Drug Act of 1971and the Food and Drug Regulations of 1977.
[11] Exceptions are vaccines, which are procured through the Pan American Health Organization (PAHO) Revolving Fund for Vaccine Procurement and managed directly by the MOH; and X-ray machinery, which are bought through a public tender process managed by the Central Tender Board.
[12] Mainly from the International Dispensary Association (IDA), which is the world's largest not-for-profit supplier of essential medicines and medical supplies. IDA supplies quality assured products at the lowest possible price to low- and medium income countries.

medical supplies.[13] Wider access to health care supplies, including essential drugs and vaccines, could sharply reduce country's mortality and disability rates.

1.22 The situation is the result of a number of problems. Firstly, there is no comprehensive national drug policy and the limited national capacity is scattered between various agencies (DCA, FDD and MMU) without an established communication system and coordination. Second, because of inadequate planning in the acquisition and problems in the distribution system, public health facilities often acquire drugs from private pharmacies using emergency procurement procedures and paying prices that are several times higher than the prices enjoyed by the MMU. Third, the storage facility of the MMU does not have adequate installations for reception, storage and delivery of pharmaceuticals and medical products. The building does not have adequate air-conditioning, temperature control or charts. There is no cold chain for products requiring conservation (e.g. vaccines, laboratory supplies). Inadequate storage conditions affect negatively the quality of pharmaceuticals and medical supplies.

1.23 Guyana is a member of the World Trade Organization (WTO). According to TRIPS (WTO intellectual property regulation) Guyana has until January 1, 2005 to adapt the national pharmaceutical patent law to the WTO regulation. At the moment Guyana does not provide patent regulation for pharmaceutical products. The adaptation of Guyana's law to WTO standards constitutes a challenge as it may reduce competition in the market for drugs under patent with serious effect on drug prices and affordability. However, the new patent regulation may also include mechanisms allowed by WTO to reduce the negative effects of the new patent system on market competition (e.g. Bolar provision).

d) Health service delivery system

1.24 The public health delivery system is based on a five-tiered structure and an upward-moving referral system comprising 182 health posts, 112 health centers, 18 district hospitals and 7 regional hospitals and 4 national hospitals, which include rehabilitation and psychiatric units and the Georgetown Public Hospital Corporation (GPHC), the largest health facility in the county.

1.25 Referrals routes from the lower levels of the system to the higher are well defined, but do not always function as intended. Dwindling public sector resources have led to a marked deterioration of the health infrastructure, and several health facilities lack personnel, drugs and basic equipment. This forces many people, especially the poor, to spend substantial portions of their income on private health care, or to bypass the health posts and centers to visit doctors at the hospitals. Patients often travel long distances to seek medical care or pay high fees to private practitioners who, in several cases, lack appropriate expertise.

[13] It is estimated that less than 50% of the Guyanese population has regular access to essential drugs. See "Strengthening of the Pharmaceutical System of Guyana. Final Report prepared by Prof. Enrique C. Seoane (Consultant). March 2004".

1.26 Many facilities are now staffed with lower cadres of staff simply to maintain an institutional presence (nursing assistants in health centers and nursing aides in hospitals, for example). Many staff are working outside of their appropriate skill set and without adequate clinical supervision. For example, the CHW has become the custodian of the rural health post and in the eyes of the community is the front line worker of the MOH, and is increasingly expected to be the primary care provider for that community, without direct or indirect (telephone or radio) contact with a more highly trained provider.

1.27 Apart from GPHC and the Regional Hospitals, hospitals do not have doctors on a regular basis. Even Regional Hospitals are able to maintain only a one specialist staffing structure, so that when the one specialist is unavailable, the service is discontinued. District Hospitals in the Hinterland Regions are staffed by Medexes without routine clinical supervision as originally intended. Occupancy levels are consistently low in all facilities, resulting in the few staff who are there not using their skills enough to develop and maintain quality at a desirable standard.

1.28 **Primary Care Facilities include** 182 health posts and 112 health centers. Health posts are located in remote areas and are generally staffed by CHWs who deliver preventive and health promoting care (including antenatal care), rather than curative treatment. However, in view of the inaccessibility of many health posts, together with shortages of staff, CHWs are often required to provide curative care in these areas. Health centers have a larger complement of staff, which may include midwives, health visitors, Medex, Dentex and CHW, and are intended to provide a full range of primary care services. Health centers and health posts provide good coverage but there are too many sites in the more densely populated areas and this exacerbates current staffing difficulties. Most health centers have only two or three professional staff in total, sometimes shared with other centers or posts. Some have visiting doctors only for one or two sessions per week.

1.29 **Hospital services.** There are an estimated 1,631 hospital beds in the public sector, complemented by 331 beds in the private sector and 225 psychiatric beds providing extended care. Acute inpatient care is distributed between district hospitals (10% of all beds), regional hospitals (35% including 10% for psychiatric care) and the GPHC (30% i.e. 615 beds), plus a few private hospitals (25%) in Georgetown. In total, 85% of all hospital beds are located in the coastal regions.

1.30 District hospitals, of which there are two or three per region, provide outpatient facilities. They have a small number of inpatient beds and are managed by a single, generalist doctor with limited equipment and diagnostic facilities. Because of these limitations, only simple cases can be treated at district hospitals and anything more complex is referred to a regional hospital or to the GPHC. Bed occupancy is very low at both regional and district hospitals and in many cases it scarcely justifies the provision of an inpatient service. Bed occupancy at the GPHC is higher, more than 80% on average. However, beds in some specialties are overcrowded whilst those in others underutilized.

C. The country's sector strategy

1.31 The GOG is in the process of significantly restructuring the nation's health services. The **National Health Plan 2003-2007** (NHP) outlines a strategy for the health sector over the next five years which aims to achieve major improvements in services and the nation's health.[14] The NHP focuses on the strategic intentions of Government, the broad directions for change and priority actions to be taken. It provides a strategic framework for the sector with coherent goals, objectives and targets for the next five years.

1.32 The GOG aims to reform the organizational structure of the health sector through the creation of 4 or 5 **Health Management Committees** (HMCs) to cover the entire country. Each HMC will have extensive control over resources, including staff, and will be fully accountable for the health of their communities.

1.33 The recent corporatization of GPH offers some lessons for achieving more effective autonomy for the HMCs. The objective of separating GPH from the MOH was to provide a higher level of managerial autonomy to the hospital in order to improve operational efficiencies (technical and administrative). GPHC has greater control and flexibility over staff, resources and other inputs. However, alongside indications that significant internal efficiencies have been achieved, some doubts emerge. The main issue is that, as the national training facility for medicine (and the largest for all other professions including nursing) GPHC is in an advantageous position to recruit all the staff it needs to the detriment of the rest of the country. This is further aggravated by the fact that GPHC can offer favorable salaries and capitalize on the desire of staff to live in or near to Georgetown. A second problem area is the suspicion that, as GPHC has control over the services it provides, it may be moving towards tailoring these more to minimizing its costs rather than to maximizing public benefits. Neither of these problems are intrinsic or inevitable consequences of autonomy. The next step for Government is to institute an effective contract (i.e. a formal service agreement contract) with GPHC, which defines what it must do in return for its public funding. This is now being discussed and drafted.

1.34 The HMCs will be phased in. HMCs will be headed by a Chief Executive Officer (CEO) nominated by the MOH and run by boards which will include the Regional Health Officer, health facilities managers and representatives of the community, and will receive technical assistance as they start up. Funding will be based on population needs and will be defined in service agreement contracts with the MOH. These will specify targets for service provision and quality standards. However, within those targets the HMC board will have freedom to decide how best to use resources to solve local problems and address local needs. As the HMCs take responsibilities for services management, the central MOH will

[14] National Health Plan 2003-2007. Ministry of Health, Guyana, Georgetown, 2003. The MOH has prepared the NHP with technical support from the Institute for Health Sector Development and with funding support from the Inter-American Development Bank (ATN/SF-5834-GY).

change to perform a governance role to ensure that HMCs are all acting in the national interests. The ministry will be restructured to do this. It will introduce annual service agreements with the HMCs which will ensure funding is allocated to priorities and that targets are set for HMC spending.

1.35 The reorganization process outlined above is being supported by the development and drafting of new legislation and its corresponding regulations. In particular, the following new legislation has been drafted and is ready to be submitted to Cabinet: (i) to provide a legal framework for the restructuring of the Ministry of Health, *Ministry of Health Act;* (ii) to regularize pilot projects that were in place with respect to HMCs and to establish HMCs as legal entities, *Regional Health Authorities Act;* and (iii) to regulate hospitals and health care facilities, *Hospital and Health Care Facilities Licensing Act*.

1.36 The first pilot HMC has been established in Region 6. Shadow management team and board of directors currently manage the HMC. The GOG aims to enact the legal framework, strengthen the first HMC in Region 6 and to gradually transfer the experience of the pilot to other HMCs.

1.37 Critical to the strengthening of the health sector is GOG's ability to attract and retain qualified human resources.[15] The MOH has established the basic package of publicly guaranteed health services to be provided at each level of care and the composition of the health team responsible for services delivery.[16] Given that health sector workers will continue to emigrate in large numbers for the foreseeable future, it will be difficult to significantly increase the number of staff employed in short term. In the short-to-medium term, GOG aims to make the best use of available staff through the consolidation of services in a smaller number of facilities, each to be fully staffed.[17] In some cases, inpatient services will be concentrated in existing regional hospitals and district hospitals will be converted into polyclinics. Consolidation and strengthening will also involve the lower levels of the system (health posts and centers). The aim is to rationalize and combine facilities in urban areas, where there is significant duplication of services, so that staffing and supplies can be increased, the role of clinical supervision strengthened, bypassing (and consequent overcrowding elsewhere) reduced, and productivity improved. While some patients will have to travel further to reach a health center or hospital as a result of these changes, the quality and efficiency of health care will be improved. The GOG also aims to combine the consolidation efforts with investments to rehabilitate and improve the physical infrastructure of health facilities with highest needs. In the medium- to long-term, GOG aims to raise the level of staff retention through improvements in human

[15] National Health Plan 2003-2007. Technical Annex 3: Workforce Development Strategy. Ministry of Health, Guyana, Georgetown, 2003

[16] Human Resources Development: The Health Team (Levels 1-4). Minister Leslie Ramsammy, Government Cabinet, Georgetown, Guyana, October 2003.

[17] Health Services Strategy. National Health Plan 2003-2007, Technical Annex 2. Ministry of Health, Guyana, Georgetown, 2003.

resources management. Recruitment methods are to be improved and training programs modernized, with a major new continuous professional development scheme planned.

1.38 The NHP aims to introduce performance management. In the new entities (i.e. GPHC and HMCs), staff will have targets that are linked clearly to the targets of the organization as a whole. Expectations will be clearly spelled out and rewards, including promotions and training opportunities, will be related to performance. Under this, individual staff will work with their managers to set individual targets that link clearly to the targets of the HMC as a whole. What is expected of staff will be clearly spelled out, and rewards including promotions and training opportunities will be related to performance. With better management, more clarity in performance, and better training – and with staff working in busy units where they know they are doing a better job – the NHP aims to improve the attitudes of staff towards patients.

1.39 The NHP also proposes to improve access to essential drugs and other health supplies. The Materials Management Unit at the MOH will maintain the central function of procurement, storage and distribution of drugs, but it will be modernized.

1.40 Finally, the NHP aims at improving the physical structure of some hospitals that will form part of a more efficient health service delivery system. However, not all health facilities will be improved. Some hospitals cannot be properly staffed and have not enough activities to justify the provision of the full set of hospital services.

D. The Bank's sector strategy

1.41 The IDB is the single largest donor under the HIPC Initiative, the largest creditor with operations spanning most sectors, and the largest provider of technical assistance and policy advices.

1.42 The **Bank's strategy for Guyana** (GN-2228-1) seeks to reduce its level of poverty in the medium term, while simultaneously addressing chronic institutional and human resource problems by providing selective assistance in three areas of development challenges confronting the country: (i) achieving sustainable economic growth; (ii) improving governance and public sector efficiency; and (iii) strengthening social programs. The proposed operation will contribute to improving the governance and efficiency of the public health sector and strengthening the provision of health services. It is also envisaged that the Program will assist with sustainable economic growth through an improved investment in human capital.

1.43 The **Bank's Social Development Strategy** (GN-2241-1) proposes four sets of actions to help countries accelerate social progress: (i) customize the implementation of reforms in health, education and housing; (ii) implement a

human development agenda over the life cycle; (iii) promote social inclusion and prevent social ills; and (iv) deliver integrated services with a territorial focus. This operation will contribute mainly to the first objective, by supporting a health reform process that aims to make a better use of public resources allocated to the sector.

E. Lessons learned from previous projects

1.44 The IDB has been a major source of funding for the health in Guyana. In 1978 the Bank approved the Health Care I Project (544/SF-GY) in the amount of US$8.8 million. The program focused on improving and expanding health service coverage to underserved areas financing the construction of health posts, health centers and district hospitals in rural areas, as well as technical cooperation to train personnel. The Social Impact Amelioration Program (SIMAP) (985/SF-GY) has continued the improvement and extension of health posts and health centers in Guyana. An important lesson learned from the execution of these two projects is that physical infrastructures are not sufficient to extend health care coverage to underserved areas. Because of inadequate recruitment and retention of health workers in rural areas, many facilities are now staffed with lower cadres of staff simply to maintain an institutional presence. The scarce human resources available in the country are spread too thin and are unable to provide health services effectively.

1.45 In 1988, the Bank approved the Health Care II Project (822/SF-GY) in the amount of US$27.9 million. This project financed the first stage of a complete rehabilitation of the GPH, a set of dilapidated buildings dating to the late 1800s. Two parallel technical cooperation agreements, one for project execution (ATN/SF-3211-GY) and one for the institutional strengthening of the MOH (ATN/SF-3206-GY), were also approved under the project. The major components of the loan, the construction of an ambulatory care, diagnostic and surgical center at the GHP and the replacement of the laundry and steam generation were completed in 1996. The project improved the quality of the health care provided at the facility, but created on-going challenges because of the increased operational costs and maintenance requirements of the renovated facility. The project highlighted the need of adopting architectural designs that are appropriate for the limited human resources of the country and which minimized post construction operational costs.

1.46 In January 1998, the IDB approved a US$2.5 million non-reimbursable Technical Cooperation (TC) Health Sector Policy and Institutional Development Program ATN/SF-5834-GY. Project deliverables included the preparation of the NHP and various Technical Annexes, which represent an important effort to identify the main challenges of the sector and delineate a clear framework for action. TC resources were also utilized to finance studies and activities associated with the preparation of the proposed operation and to support the start-up of the pilot HMC in Region 6

1.47 In December 2002, the IDB approved the Basic Nutrition Program (1120/SF-GY) which focuses on three areas of intervention: (i) child feeding practices, which includes nutrition training and a food coupon scheme; (ii) anemia reduction, which includes purchase and distribution of micronutrients to young children and pregnant women; and (iii) institutional strengthening and impact evaluation, which includes the development of a management information system, evaluation of the interventions, technical assistance and training.

F. Coordination with other Multilateral Agencies

1.48 During the preparation of the Program, the Bank's project team held working sessions with various international agencies involved in the social sectors in Guyana such as the European Union (EU), Canadian International Development Agency (CIDA), Caribbean Food and Nutrition Institute (CFNI), Japan Development Corporation Agency (JDCA), Global Fund for AIDS, Tuberculosis and Malaria (GFATM), US Agency for International Development (USAID), the Pan American Health Organization (PAHO), World Bank (WB), United Nations Children's Fund (UNICEF), etc. Table I-2 summarizes the most important health sector activities financed by multilateral and bilateral development agencies.

1.49 The MOH with resources from the TC ATN/SF-5834-GY has developed strategies and master plans to identify priorities and overall development strategies in the following areas: (i) national health information and management system; (ii) workforce development; (iii) national health sector strategy (i.e. the NHP); (iv) health facilities rationalization and consolidation plan; and (v) prioritization plan for physical infrastructure investment in the health sector. These master plans and strategies are useful tools to direct and coordinate donors' support directed to the health sector.

Table I-2. Externally funded programs in the health sector

Founder	Program Description	Amount US$
CAREC	Improve laboratory capacity.	US$5M
CIDA (Health MIS)	Health Surveillance system, microbiological laboratory	US$4M
CFNI	Nutrition	Technical Assistance
EU	Direct non-targeted budget support program with health sector indicator.	US$25M (€23.3M)
GFATM	HIV/AIDS and Tuberculosis (TB)	US$30.7M
GFATM	Malaria	US$6M
IDB (1120/SF-GY)	Nutrition	US$5M
JDCA	Rehabilitation of New Amsterdam Regional Hospital	US$12M
PAHO	Baby Friendly Hospitals, pharmaceuticals, etc	Technical Assistance
USAID	HIV/AIDS. Reduce mother to child transmission of HIV infection	US$12M
UNICEF	Maternal and Child Health (MCH), Integrated Management of childhood illness (IMCI)	Technical Assistance
World Bank	HIV/AIDS and STD	US$10M

II. THE PROGRAM

A. Goal and objectives

2.1 The goal of the project is to improve the effectiveness, quality and equity in access to health services in Guyana. The purposes of the Program are to strengthen the organizational and institutional capacity of the health sector, and to improve the health services delivery system.

B. Program strategy

2.2 The proposed Program aims to support GOG's reform efforts in the health sector and key improvements in the health services delivery system. Firstly, the reorganization process of the health system envisaged by the NHP – the creation of more independent HMCs, and the use of service agreement contracts between the MOH and the decentralized entities responsible for the delivery of health services (HMCs and the GPHC) – requires initial investments to improve the health legislation and regulatory framework; technical assistance to enhance the institutional and managerial capacity of both the MOH and the decentralized entities and to support the organizational changes in the health system; and support community and user involvement in monitoring the quality of health care provided. In order to maximize the transfer of knowledge from the international and local consultants providing technical assistance and the local counterpart team, consultants will be mainstreamed directly into MOH technical units to support MOH implementation and management of the various component, subcomponents and activities.

2.3 Secondly, the Program will address human resource constraints in the health sector. Because it is not envisaged the possibility of reducing the strong "pull" on the human resources of Guyana exercised by foreign countries, the Program aims to address the key "push" factors: develop the workforce planning capacity of the sector; modernize the recruitment process; improve human resources management, modernize and expand the training programs for primary care workers (i.e. CHW, nurses and Medex); establish innovative and financially sustainable program to attract, retain human resources particularly in rural areas and enhance productivity in the provision of primary health services.

2.4 Thirdly, based on the national health information and management master plan financed with resources from TC ATN/SF-5834-GY, the Program will finance key IT investments. The IT investment envisaged as part of the Program will complement those financed by other international development agencies and other IDB programs such as Basic Education, Access, Management Support (BEAMS). The Program will also support improvement in the national pharmaceutical system in order to expand access to quality essential drugs, vaccines and other health care supplies.

2.5 Resources from TC ATN/SF-5834-GY financed the preparation of comprehensive prioritization and rationalization plans for capital health care projects considering the following dimensions: (i) physical status of the infrastructure; (ii) the actual and expected utilization of the facilities; and (iii) human resource capacity. The prioritization plan identified health facilities requiring priority rehabilitation. Functional plans and Post-Construction Operational Budget (PCOB) were developed to determine the optimal level of sustainable improvements to be financed by the Program. The rationalization plan for hospital facilities represents a roadmap for MOH to realign hospital capacity to population health needs and optimize the deployment of scarce human resources. The scope of the rationalization plan will be expanded during the execution of the Program to cover health centers and health posts. A structured approach to services development will be adopted during Program implementation. This means that investments will be linked to the minimization and, where possible, elimination of redundant physical capacity, as well as evidence that the execution of the Program among its main components and subcomponents is proceeding evenly and balanced.

C. Program components

2.6 The Program will finance activities in two components: (i) organization development and institutional capacity improvement; and (ii) health service delivery improvement. The organization of the components, sub-components and activities is presented in Table II-1.

Table II-1. Program components, subcomponents and activities

Subcomponent	Activities
Component 1. Organizational and institutional capacity improvement	
1.1 Institutional strengthening of the health system	Draft health legislations and regulations Enhance management capacity and capability to develop and monitor service agreements Design and implement an effective communication and change management strategy at MOH and HMCs Design and implement a public awareness campaign
1.2 Human resource development	Modernize the recruitment process, workforce planning capacity and human resource management Modernize and expand training programs for CHW, nurses and Medex Financially sustainable incentives to attract, retain human resources, and enhance productivity
1.3 Health management information system improvement	Strengthening IT capacity at central and regional level Develop an health information management system Develop an human resources management system Develop an health infrastructure maintenance system
1.4 Strengthening of pharmaceutical system	Technical assistance to improve the organizational structure, pharmaceutical policy capacity and regulation, and rational use of drug. Comprehensive and modular procurement information system Improve the storage facilities, distribution system and cold chain for health care supplies
Component 2. Health service delivery improvement	
2.1 Group I	Rehabilitation and upgrade of the McKenzie Regional Hospital (Linden) Upgrade the electric, water and sewage system at the GPHC compound
2.2 Group II	Rehabilitation and upgrade of the inpatient ward of the GPHC Feasibility studies, rehabilitation and upgrade of other priority facilities

1. Component 1. Organizational development and institutional capacity improvement (US$ 6.50 million).

a) Institutional strengthening (US$ 2.20 million)

2.7 Aligned with the objectives of the NHP and the PRSP, this subcomponent will assist MOH effort to strengthen system-wide governance and improve institutional capacity. As the HMCs take on services management, and the central MOH change to perform a governance role to ensure that HMCs are all acting in the national interests, major changes in business processes and extensive training and staff organization will be undertaken. Program technical assistance will support MOH to: (i) improve and update the new organizational structure and functions of the health system based on the new legislative framework; (ii) define the type and nature of financial information required for effective decision-making, including capacity-building for the development, monitoring and evaluation of service agreements contracts between the MOH and the GPHC/HMCs; (iii) design and implement an effective communication and change management strategy at MOH and HMCs; (iv) enable better community and user involvement in monitoring the new health system; and (v) develop policies and funding formulas that support the equitable distribution of human and financial resources to disadvantaged areas.

2.8 The TC ATN/SF-5834-GY supported the MOH in drafting the *Ministry of Health Act* and the *Regional Health Authorities Act*, which clearly define the duties, powers and authorities of MOH and HMCs as principal agents in the governance and delivery of health, the statutory roles of the Minister of Health, Permanent Secretary, Chief Medical Officer, HMC, HMC Board, HMC Chief Executive Officer, and the right and duties of users. Working in close collaboration with the MOLG and the RDC, an MOH working group, with the technical support of international and national expert will develop and draft the regulations and the services agreements between the MOH and HMCs, which will accompany the *Ministry of Health Act* and the *Regional Health Authorities Act.* **In addition, new legislation will be drafted:** the *Hospital and Health Care Facilities Licensing Act* will to regulate hospitals and health care facilities, and a new *Public Health Act* and *Food and Drugs Act*.

2.9 Modern **governance ad management** of the health sector will result in greater public accountability. MOH capacity to define and monitor national health policy will be enhanced. Likewise, up-to-date information and financial management system will support delegation of authorities for day-to-day operational issues to lower level bodies (HMCs) that are closer to communities being served.

2.10 To achieve the fundamental organizational changes described a robust program for change management and professional development of health managers will be financed. **A Change Management Technical Assistance team**, composed by a full-time international and local consultants will be the vehicle to address this fundamental activity, key for a successful reform of the health sector. It is

envisaged that a combined external and local expertise may be optimal to overcome possible organizational and institutional resistance and institutionalize the innovation proposed.

2.11 Community involvement is central to the successful execution of the new health system organizational changes. A nationwide **public-awareness campaign** will be conducted over the life of the Program to engage stakeholders in these reforms. The campaign will be reinforced by workshops at the health posts and health centers that support community linkages and mobilize patients' involvement.

b) Human resources development (US$ 2.15 million)

2.12 As described in Chapter I human resource shortage in the health sector is not only an issue of inadequate supply and planning, but also an issue pertaining to the retention of experienced personnel at all levels of the health system. Program technical assistance will support MOH to: (i) develop workforce planning capacity and human resource management structures; (ii) modernize the recruitment process for all health sector employees; (iii) modernize and expand training programs for CHW, nurses, and Medex; and (iv) support the development of innovative non-financial incentives to attract and retain human resources in the health sector, particularly in rural areas, that can be sustained in the long term.

2.13 Loan resources will support the enhancement of **human resources planning, recruitment and management capacity** both at the central MOH and the decentralized entities (GPHC, HMCs, RDC and hospitals) through the provision of technical assistance, goods, and services. The results will lead to an organization structure and culture that reflects a modern management environment and provides opportunities for professional advancement, which in turn is consistent with the Government's overall Public Sector Modernization Plan announces in June 2003.

2.14 The Program will support during year 1 the design of the enhanced training and through the subsequent 4 years and 6 months of project execution technical assistance, goods and services to design and implement a comprehensive program to enhance and expand the **training program for CHW, nurses and Medex**. Likewise, the Program will support the development of clinical supervision programs for CHW, nurses and Medex linked to continuous professional development programs. The expanded training program will begin in the pilot HMC in Region 6, training the human resources necessary to adequately staff the health teams in the region.[18] To ensure the sustainability of the training program, the GOG will have to show evidence to the Bank of their incorporation in the permanent payroll of the RDC/HMCs (see ¶3.32).

[18] The Regional Health Plan (Health Management Committee Region 6, Regional Health Plan 2004-2008. Final Draft. Prepared by Dr. Francisco Xavier Solórzano (Consultants). February 2004) envisages 21 primary health teams will comprise approximately 204 CHWs, 4 nurses, 5 Medex, 5 physicians, 5 environmental officers, 2 dentists and 2 dental assistants. However, the number of primary health teams may be revised as result of the health facilities rationalization plan.

2.15 **Health workers supply, demand and incentives.** In Guyana, attrition is not simply an issue of insufficient health workers (physicians, nurses and allied health workers) supply, but rather an issue pertaining to the retention of experienced health workers at all levels in the system. During year 2, the loan will provide technical assistance and policy analysis resources to assist GOG develop viable policies for health sector worker retention and remuneration within the context of a sustainable government-wide public-sector modernization strategy. Such policies will include the establishment of non-pecuniary incentives including: a permanent system of professional development and support at each level of care; and the provision of residential accommodations to attract and retain qualified health workers in remote locations. The Program will further inform this process during years 3-5 through the provision of financial resources to pilot and evaluate the use of incentives to favor retention of health workers in remote areas, and improve productivity in the delivery of primary health care interventions. The pilot will be designed in the second year of the program, implemented in two health teams (Level 1) serving the population of two population centers in the HMC Region 6 starting in the third year of the program, and will be evaluated using a controlled before and after evaluation in the fifth year of the program (see ¶3.30).

c) Health management information system improvement (US$ 1.10 million)

2.16 The MOH will strengthen its monitoring and evaluation capacity through the improvement of the national Health Management Information System (HMIS), which will support asset management and instructional activities including human resources, patients' records, infrastructure, financial resources and sector performance. HMIS will consist of a limited set of applications for managing patients' data, human resources, and health facilities using a database that integrates the individual applications and its accessibility over a network of MOH, HMC/RDC and selected health facilities.

2.17 Loan resources will provide technical assistance, hardware and software through the following lines of action: (i) define formal HMIS **policies and procedures** covering how systems are to be acquired, used and supported, including hardware and software standards, security access and support; (ii) **training for HMIS users** in project management, systems analysis, user support, database technology and networking; (iii) develop HMIS protocol for an **integrated patients, human resource, health facilities and performance data**; (iv) develop a practical computerized **Routine Maintenance Management System** (RMMS) for health facility infrastructures and essential medical equipments.

2.18 National and international technical assistance will support the development of the HMIS, its database and expansion at regional level. Intensive training will be provided for health sector staff involved in HMIS.

d) Strengthening of the pharmaceutical system (US$ 1.05 million)

2.19 The objective of this subcomponent is to improve access to essential drugs, vaccines and other health care supplies for all Guyanese. To achieve this objective, loan resources will provide technical assistance to strengthen **institutional capacity**, clearly define responsibilities and enhance coordination between the different departments responsible for pharmaceuticals and health care supplies. The role of the FDD will be strengthened as the agency controlling the safety, efficacy and quality of drugs, as well the regulatory and policy functions related to pharmaceuticals (e.g. rational use of drugs).

2.20 Loan resources will finance the acquisition of goods and services to set up a comprehensive and modular pharmaceuticals and health care supplies **procurement information system** for the MMU; and improve the **storage facility, distribution and cold chain** for pharmaceuticals and other health care supplies at the MMU and key regional facilities.

2. Component 2. Health Service Delivery Improvement (US$ 16.16 million)

2.21 Loan resources under this component will finance civil works, goods and services related to the final design, construction, supervision, furnishing, equipping and rehabilitation of priority health facilities. The prioritization plan for capital health care projects financed under the TC ATN/SF-5834-GY identified health facilities requiring priority rehabilitation. Functional plans and Post-Construction Operational Budget (PCOB) were developed to determine the optimal level of sustainable improvements.

2.22 The health facilities identifies for priority investment are grouped into two subcomponents (Group 1 and Group 2). To ensure that the execution of the activities planned in the two components are implemented in a balanced manner, special conditions will be required before the GOG could commit the resources of Component 2 directed to finance the rehabilitation of the second group of health facilities (see ¶3.23-3.25).

a) Architectural design and supervision (US$ 1.15 million)

2.23 The PPEF GY-L1005 (see ¶3.27) is financing the final architectural designs, engineering specifications and tender documents for the civil works included in Component 2.

b) Group 1 (US$ 7.65 million)

2.24 The first priority identified is the McKenzie Regional Hospital at Linden (Region 10). This hospital is a one storey wood building; the floors are cracked and heaved and its general condition is considered between very poor and

unacceptable. Similarly, urgent infrastructures improvement at the GPHC compound will be financed in the first group.

2.25 This subcomponent will finance the construction, supervision, furnishing and equipment for the rehabilitation of the **McKenzie Regional Hospital** and the following infrastructure improvements at the GPH compound: (i) improve the electrical power distribution system including the main power generator and the backup system; (ii) enhance the potable water supply and distribution systems; and (iii) improve the capacity of the septic tanks and of the sewage system.

c) Group 2 (US$ 7.35 million)

2.26 Another priority identified is the rehabilitation of the inpatient wards of the GPHC, a set of dilapidated two and three storey wooden building more than 60 years old. This subcomponent will finance the construction, supervision, furnishing and equipment needed to rehabilitate the **inpatient ward of the GPHC** and address critical needs at the GPHC compound, including: (i) replacement of north block inpatient facilities including male and female medical and surgical beds; and the (ii) replacement of the south block inpatient facilities.

2.27 Residual loan resources allocated to the component may be used to finance the final design, construction, supervision, furnishing and equipment needed to rehabilitate other health facilities, following the order of priorities established in the prioritization plan (see ¶2.21).

3. Program coordination, unallocated costs and financial costs (US$ 2. 90 million)

2.28 US$1.5 million is included in the project to finance the operational costs of the Project Implementation Unit (PIU), key positions of the Health Sector Development Unit (HSDU), the monitoring and evaluation of the Program, and the mid term and final evaluations of the Program, and US$0.8 million for unallocated expenditures. Associated financial costs including commitment, and inspection fees add an additional US$0.6 million.

D. Cost and financing

2.29 The total cost of the Program is US$25.555 million. The Bank's loan of US$23.0 million will account for 90% of total project costs. Local contributions will cover the remaining 10%. The duration of execution is of 5 years. The breakdown by investment categories is presented in Table II-2.

Table II-2. Cost Table in US$ (000)

Components	Bank	Borrower	Total	Total (%)
1. Organization and institutional capacity improvement	**6,000**	**500**	**6,500**	**25.4%**
1.1 Institutional strengthening	1,650	200	1,850	7.2%
1.1.1 Support to the MOH-PIU and HMC in Region 6 (PPEF GY-L1004)	350			
1.2 Human resource development	2,000	150	2,150	8.4%
1.3 Health management information system improvement	1,000	100	1,100	4.3%
1.4 Pharmaceutical system strengthening	1,000	50	1,050	4.1%
2. Health service delivery improvement	**14,470**	**1,685**	**16,155**	**63.2%**
2.1 Architectural design and supervision (PPEF GY-L1005)	1,150			
2.2 Group I	6,750	900	7,650	29.9%
2.3 Group II	6,570	785	7,355	28.8%
3. Program coordination	**1,500**	**-**	**1,500**	**5.9%**
3.1 PIU-HSDU	1,000	-	1,000	3.9%
3.2 Monitoring and evaluation	300	-	300	1.2%
3.3 Auditing	200	-	200	0.8%
SUB TOTAL	**21,970**	**2,185**	**24,155**	**94.5%**
4. Unallocated costs	800	-	800	3.1%
5. Credit fee	-	370	370	1.4%
6. FIV	230	-	230	0.9%
GRAND TOTAL	**23,000**	**2,555**	**25,555**	**100.0%**
% Source	90%	10%		

III. PROGRAM EXECUTION

A. The borrower and executing agency

3.1 The Borrower is the Cooperative Republic of Guyana. The executing agency is the Ministry of Health.

B. Program execution and administration

3.2 Project implementation will rely on an **integrated management model**, whereby MOH maintains overall responsibility for achieving Program objectives, executing all interventions, and financial oversight. Under this model, MOH units will develop and execute the Organization and Institutional Capacity Improvement component activities of the Program. MOH unit directors and senior officers will manage the implementation of assigned sub-components using annual workplans and an integrated Project Management Information System (PMIS).[19] Short and long-term technical assistance will be mainstreamed directly into MOH line units to enhance implementation capability, support task management, and produce an effective transfer of skills and technology.

3.3 The proposed integrated management model relies upon effective integration among all MOH units and GPHC, HMCs, and RDCs. A **Project Management Council** (PMC), chaired by the Minister of Health, forms the core management body of the Program. Comprises of the Permanent Secretary, directors, managers and principal officers of the MOH, regions and other relevant entities, the PMC will align Program implementation plans to health policy, facilitate project decision-making, and sanction project execution. The PMC will meet monthly to program activities, resolve internal problems, and promote effective networking among department heads that are the component leaders/managers. The PMC will monitor progress against substantive qualitative and quantitative targets and benchmarks. The director of the PIU will provide the secretariat function to the council (see ¶3.5-3.6).

3.4 Department heads and principal officers who are assigned specific responsibilities for execution the Program will form **Technical Coordination Units** (TCU) for each component and sub-component. The TCUs are responsible for bridging broad plans and objectives to the tactical implementation and internal coordination required for the execution of each component. TCUs report within MOH line structure. Chaired by the respective division head, TCUs will include MOH staff, contract staff and consultants working on the sub-component.

3.5 A relatively small **Program Implementation Unit** (PIU) will be responsible for general project administration, coordination, monitoring and procurement. The PIU will maintain overall responsibility for achieving Program objectives, executing all interventions and financial oversight. Reporting directly to the

[19] The MOH, BEAMS-PIU and the IDB have agreed to adopt the PMIS developed for BEAMS program.

MOH Permanent Secretary, the PIU director consolidates the administration of all elements of the project and has overall responsibility for the execution of the Program.

3.6 The PIU will be based at the Health Sector Development Unit (HSDU) of the MOH and it will build on the existing capacity of the Project Execution Units (PEU) of other IDB health projects, the Health Sector Policy and Institutional Development Program TC (ATN/SF-5834-GY) and the Basic Nutrition Program (1120/SF-GY), whose PEU are both based at the HSDU. The HSDU is also in charge of general coordination between international donors, lender organizations and the MOH, which is likely to enhance coordination between the proposed IDB Program and other externally funded health programs.

3.7 The PIU will execute the civil works. It will also conduct the treasury and accounting functions for the Program. Specific tasks of the PIU will include, among others: (i) preparing semi-annual progress reports documenting project implementation, outcomes, and outputs; (ii) preparing and administering the Program budget; (iii) updating implementation schedules and expenditure plans; (iv) documenting the bidding and contract administration process; (v) monitoring indicators and compliance with technical and contractual standards established; (vi) monitoring institutional and policy agreements; and (vii) monitoring GOG budgetary allocations and execution for capital and recurrent costs to the health sector in general and to health facilities maintenance specifically.

3.8 The COF/CGY and the GOG are developing a scheme of performance-based incentives for use in Bank's programs. Once the incentive scheme is finalized, performance-based incentives will be introduced in the PIU project director contract.

3.9 Prior to the first disbursement of loan resources, two special conditions must be fulfilled:

3.10 **Satisfactory submission of evidence to the Bank that the Executing Agency has appointed the Project Director and three key staff of the PIU (Financial Manager, Civil Work Manager, and Procurement Officer), according to the terms of references previously agreed with the Bank.**

3.11 **Satisfactory evidence should be submitted to the Bank that the legal and regulatory framework required for the formal establishment of the HMCs has been approved. Specifically, the *Ministry of Health Act* and the *Regional Health Authority Act* should both be enacted.**

1. Accounting, internal control and reports

3.12 For the management of the project's financing resources, the MOH will open separate and specific commercial bank accounts for managing the Bank loan and local counterpart funds.

3.13 The MOH-PIU will design and maintain adequate financial, accounting and internal control systems to allow identifying the sources and use of project funds, provide documentation to verify transactions and to facilitate timely preparation of financial statements and reports and disbursement requests to the Bank.

3.14 Project financial and accounting records will be arranged so that (i) the amounts received form the various sources can be easily identified; (ii) project expenses are register identifying goods acquired and services contracted and other costs in accordance with the chart of accounts approved by the Bank, with distinction made between the Bank loan and funds from other sources; and (iii) maintaining an adequate disbursements and contracting supporting documentation filing system for eligible project expenditures.

C. Operating regulations

3.15 The execution of the Program is governed by the operating regulations, which includes the procedures and regulations necessary to execute each component of the Program, as well as the functions and responsibilities of the different agencies involved in the execution. Flow charts and administrative procedures for procurements and disbursements are included in the manual. The procedure manual will expedite routine operational procedures, and will be update as procedures evolve and modernize. **The official adoption of the Operating Regulations of the Program is a condition prior to the first disbursement of loan resources.**

D. Revolving fund

3.16 The Bank will disburse 5% of the financing to establish a revolving fund to pay for project expenditures. Replenishment and reporting on the revolving fund will follow Bank procedures.

E. Procurement of goods and services

3.17 The procurement of all civil works, good, and related services will follow the Bank's procurement rules as stated in Annex B of the loan contract. The thresholds above which procurement will be subject to international competitive biddings are equal or above US$250,000 for goods and related services, and equal or above US$1,000,000 for civil works. Acquisition of consulting services will be subject to the procedure set forth in document GN-2220 – 10 February 2004.. International competitive bidding will be mandatory for consultant services

contracts exceeding US$200,000. The detailed procurement plan for the loan operation is included in Annex II.

3.18 In order to ensure adequate assistance and maintenance for the computer hardware acquired as part of the Program, the tender documents will include maintenance clauses and will require that providers will have the capacity to provide maintenance and customer assistance in the country. To ensure compatibility with the operative system and software used by the GOG, tender documents for the acquisition of computer software will require compatibility with the operative system used by the GOG.

1. Component 1. Organizational development and institutional capacity improvement

3.19 International and local consultants providing technical assistance to the GOG will be mainstreamed directly into MOH technical units to support MOH implementation and management of the various component, subcomponents and activities. MOH unit heads will be responsible for generating consultant's terms of reference, providing managerial oversight, integrating counterpart personnel, guiding implementation, and signing-off on deliverables financed under the project. PIU will procure technical assistance and provide administrative support to MOH in managing consultant contracts. Long-term consultant staff will have technical, training and coordination responsibilities. MOH will introduce performance-based contracts for all non-permanent staff and consultant hired under the project. **As a special condition prior to first disbursement, GOG will present the Bank evidence that the Executing Agency has selected and the Central Tender Board has approved the long-term Consultancy Firm contract for the provision of technical assistance under Component 1.**

2. Component 2. Health service delivery improvement

3.20 Up to US$14.47 millions of loan resources are allocated to Component 2. The civil works will be implemented in two subcomponents (Group 1 and Group 2).

3.21 Health facilities rehabilitated or improved as part of Component 2 will have to be drawn from the list of facilities identified in the prioritization plan.[20] The procurement and supervision of contractors, consultants and goods will be carried out by the PIU.

3.22 The final architectural designs, engineering specifications and tender documents of the civil works under Component 2 are financed by the PPEF GY-L1005 (see ¶3.27). The Executing Agency, prior to issuing each call for public tendering, will present to the Bank the final architectural designs, engineering specifications and tender documents for the construction, supervision, furnishing and equipment.

[20] Physical Prioritization Plan. Functional Program Consultancy. Prepared by Donald Ardiel, Brad Keeler and Mike Ross (Consultants). Final Report March 2004.

3.23 **As special conditions, commitment of loan resources from subcomponent Group 2, will be contingent upon**:

a. Commitment of the 50% and disbursement of the 20% of resources allocated to Component 1;

b. The MOH has entered into services agreements with the HMC of Region 6, and the GPHC;

c. The management team[21] of the HMC in Region 6 is fully staffed and incorporated in the payroll of the HMC;[22] and

d. The Regulations for the Ministry of Health Act and the Regional Health Authority Act have been enacted.

3.24 Upon GOG request, the Bank will evaluate whether the special conditions prior to committing loan resources for Group 2 have been fulfilled.

F. Building and equipment maintenance.

3.25 MOH and the Bank agree that the level of GOG recurrent resources necessary to maintain the existing stock of health facilities should be enhanced. Standard maintenance clause will be included in the loan contract. In addition as part of the Program the MOH will develop a practical computerized Routine Maintenance Management System (RMMS) for health facility infrastructures and essential medical equipments (see ¶2.17). **As special condition prior to committing loan resources for Group 2, GOG will present evidence that the computerized RMMS for health facility infrastructures and essential medical equipments has been designed and the MOH has approved its implementation.**

G. Execution and disbursement schedule

3.26 The Program will be executed over a five-year period from the signature of the loan contract. The resources of the Program will be disbursed over a five and half year period as reflected in Table III-1. This schedule is feasible given the limited number of international competitive biddings foreseen under the Program and the significant improvement in portfolio execution achieved by GOG and COF/CGY.

[21] The HMC management team will comprise, as minimum, the following position: (i) a Chief Executive Officer; (ii) a Finance Director; (iii) a Director of Medical Services; (iv) a Facility Management Director; and (v) a Human Resource Director.

[22] The Health Teams composition is defined in the document: Human Resources Development. The Health Team (Levels 1-4). Minister Leslie Ramsammy, Government Cabinet, Georgetown, Guyana, October 2003

Table III-1 Disbursement Schedule US$ (000)

Sources	Year 1	Year 2	Year 3	Year 4	Year 5	Year 5.5	Total
BID	2,500	3,000	4,000	5,500	6,000	2,000	23,000
Local	278	333	444	611	667	222	2,555
Total	**2,778**	**3,333**	**4,444**	**6,111**	**6,667**	**2,222**	**25,555**
%	11%	13%	17%	24%	26%	9%	100%

H. Project Preparation and Execution Facility (PPEF)

3.27 The GOG has requested the utilization of the PPEF facility for up to US$1.5 million. The PPEF is providing financing for the following activities : (i) up to US$ 1,150,000 for the final architectural designs, engineering specifications and tender documents for the civil works included in Component 2 (GY-L1005); and (ii) up to US$350,000 to strengthen the implementation capability of the Ministry of Health (MOH) and the pilot Health Management Committee (HMC) in Region 6, and cover financing gaps in the implementation of the pilot HMC (GY-L1004). (Institutional Strengthening subcomponent of Component 1). The specific activities to be financed by the PPEF are indicated in the procurement plan (Annex II) of this document.

I. External audits

3.28 MOH will submit to the Bank, within 120 days after the closing date of each fiscal year and within 120 days after the date of the last disbursement of the financing, the financial statements of the project, audited by a firm of independent auditors acceptable to the Bank, based on the terms of reference previously approved by the Bank (Document AF-400). The private audit firm will be selected and contracted in accordance with the Bank's bidding procedures for audit firms (Document AF-200), and will be paid with the Bank's financing.

J. Project monitoring and evaluation

3.29 A comprehensive **logical framework** has been defined (Annex I) containing outcome and output indicators, baselines and targets. The indicators selected at *components* level emphasize the advancement toward the targets established by the Program. The indicators established at *purpose* level will monitor advancements in the improvement of the institutional capacity of the sector and the health services delivery system using specific indicators such as: (i) vaccination rate among children under 1 in regions 6 & 10 above 85% for all vaccines; (ii) provision of drugs and other medical health care supplies to health facilities within 1 week from requests increases from 50% to 85%; (iii) population clusters with fully staffed health care teams increased from 30% to 85%; and (iv) improve bed occupancy at health facilities rationalized from 40% to 65%. At the *goal* level, the Program will monitor improvements in the effectiveness and quality of health services provided, through indicators such as: (i) reduce maternal

mortality rate from 170 per 100,000 to 90 per 100,000; (ii) reduce by 15% inter-regional variation (standard deviation) in hospitalization rates for general medical services; and (iii) reduce by 15% inter-regional variation (standard deviation) in diagnostic services.

3.30 The component level indicators include the design in the second year of the program, implementation (starting in year 3) and evaluation (in year 5) of a pilot target payment system for primary care in the HMC Region 6 (see ¶2.15). The pilot will be evaluated using a controlled before and after methodology. The evaluation will focus on process measures that are close proxies for health outcomes (e.g. vaccination rates, pre-natal and post-natal visits), as well as quality of health services perceived by users.[23] The control group will include health teams and population cluster with similar geographical, demographic and socio-economic characteristics.

3.31 Monitoring and reporting will be the responsibility of the PIU. The MOH-PIU present to the Bank semi-annual **progress reports** during the execution of the Program, which will detail activities undertaken, outcomes, outputs and results achieved during the period, as well progress made in each component and subcomponent in terms of disbursements and targets agreed in the logical framework of the Programs and recommendations.

3.32 As a **special execution condition**, the MOH shall present to the satisfaction of the Bank an annual report containing, among others, information on: (a) the number of nurses, MEDEX, and community health workers trained; and (b) the number of nurses, MEDEX, and community health workers incorporated in the payroll system of the HMC in Region 6.

3.33 A **project launch workshop** will be held within three months of disbursement eligibility. The workshop will familiarize all parties engaged in the Health Sector Program execution with their responsibilities, the Program's strategy, the implementation plan, execution procedures and the evaluation framework.

3.34 The Bank and GOG will conduct two **joint monitoring and reviewing meeting** per year during the first two years of project implementation, and one review per year in subsequent years. Scheduling of the reviews will occur within 2 months of the receipt of the semi-annual report. The reviews will gauge progress toward achieving project implementations targets.

3.35 The Program will include **a mid-term and a final evaluation** of the Program, which will be financed as part of the project. The mid-term evaluation will be triggered by the commitment of 50 percent of loan resources. The final evaluation will be triggered by the disbursement of 90 percent of loan resources.

[23] Health outcomes (e.g. maternal and infant mortality) will be collected. However, because of small sample size and rarity of the adverse events it is envisaged that it will be difficult to assess with statistical certainty the direct impact of the intervention on health outcomes.

The evaluations will be based on the outcome indicators, outputs, targets and baselines included in the logical framework (Annex I).

3.36 Data for baseline and target indicators is drawn from household surveys, routine data collection and sector studies financed under the previous TC. For certain indicators specified in the Logical Framework, baseline data will be refined prior the initiation of the related Program activities. The extent of compliance with established targets will be measured using annual reports, special studies, surveys and routine data. The costs of these data collection activities during the period of project execution have been built into the project components.

3.37 The MOH-PIU will collect, store and retain all necessary information, indicators and parameters, including the annual plans, the mid-term review, and final evaluations, to help: (i) the Bank to prepare the Project Competition Report (PCR); and (ii) the Bank's Oversight Evaluation Office (OVE), if so wishes, to evaluate the impact of this operation in accordance to GN-2254-5.

IV. VIABILITY AND RISKS

A. Institutional viability

4.1 The preparation of the Program has profited from lessons learned in previous health projects, as well as broader Bank experience in the country. In particular the TC Health Sector Policy and Institutional Development Program ATN/SF-5834-GY approved in 1998 prepared the groundwork of this operation and the setting up of the PIU.

4.2 Given that the implementation of a new project generally required some initial accommodation period, the following measures have been identified to facilitate a rapid project start-up and to ensure continuity in the transfer of expertise accrued during the execution of the TC ATN/SF-5834-GY to the new Program: (i) the use of the PPEF to allow the continuation of activities initiated under the TC ATN/SF-5834-GY to set up the pilot HMC in Region 6 (see ¶3.27); (ii) the infusion of technical assistance and support directly into MOH's work program; and (iii) roll-over of core staff from the TC ATN/SF-5834-GY into the new Program.

4.3 The Program will further strengthen MOH capacity to deliver quality health care, and clarify the lines of authorities and accountability at regional and central level. In support of this objective, the *Ministry of Health Act* and the *Regional Health Authorities Act* – already drafted and approved by the health policy committee of the MOH – will be submitted for consideration of Cabinet, and subsequently submitted in a timely manner to ensure Parliamentary debate and approval.

B. Socioeconomic viability and social impact

4.4 Guyanese population is ethnically and culturally diverse and the operation builds upon extensive national consultation undertaken by MOH as part of the development of its NHP. Component 1 of the Program will support community involvement in monitoring the quality of health services provided, as well as activities directed to improve the transparency of the interview, selection and due-process in the recruitment of human resources and the provision of incentives to attract and retain human resources in rural areas. Such activities are crucial to improve the ethnic and cultural diversity of human resources in the health sector to match population, enhance cultural accessibility and improve access to services in rural and poor areas.

4.5 The Program will improve provision of primary and preventive health care services in the country, starting from the pilot HMC in Region 6. Provision of primary and preventive health care has proved to be cost-effective strategy to improve population health, in particular in context of limited financial and human resources, such as the Guyana.

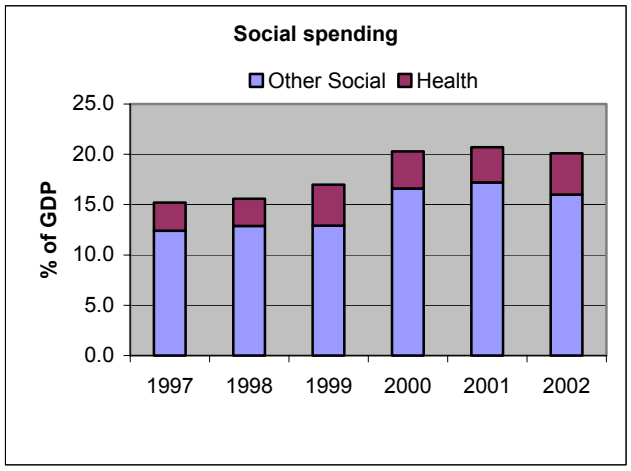
4.6 The investments directed to the rehabilitation of health facilities were selected through a comprehensive prioritization and rationalization plan which considered: (i) the physical status of the infrastructure; (ii) the actual and expected utilization of the facilities; and (iii) human resource capacity. In order to determine the optimal level of sustainable investment, functional plans and post-construction operational budgets were developed with the participation of the relevant stakeholders.

4.7 Through improvement of the efficiency and equity of the health system, the Program will be able to improve health care to all of Guyana's population. Moreover, since users of public health facilities are predominantly poor (see ¶4.13), it is expected that the positive social impact of the Program will favor particularly the poor.

C. Financial viability

4.8 The Program has been analyzed in terms of the medium term availability of resources to the health sector, Government's counterpart resources for the Bank loan, and its capacity to sustain incremental recurring costs associated with the new investments and services.

4.9 Guyana's PRSP provides the framework for the further investment of HIPC resources, as well as future resources channeled to Guyana by the international community. Since the adoption of the PRSP, progress has been made in reaching several of its objectives. Indeed, HIPC debt relief has already helped to boost social spending in Guyana, which was an objective of both the HIPC and PRSP processes. Pro-poor growth spending on education, health, housing and water and other poverty alleviation programs– grew from 15% to 20% of GDP in the 1997-2002 period, compared to an overall rise in spending of only 3.5% of GDP. Health care spending also rose significantly, by 1.8% of GDP, during the period.



4.10 In terms of budgetary resources, the Government proposes to continue meeting demands through the dedication of HIPC resources earmarked for the health sector. The 2004 Budget already includes a budget line for the Health Sector Program. In 2003, the Government maintained counterpart funding for externally funded projects at a ratio of 1:10 in the overall Public Sector Investment Program (PSIP), and the PSIP in 2004 suggests an increase of counterpart to 1.7:10, which reflects the large investments in sugar sector rehabilitation envisioned by the PRSP.

4.11 The table below captures projected social sector and health sector spending. Overall social sector spending is expected to increase from 19% to 22.1% of GDP over the 2003-09 period, mainly reflecting already agreed HIPC targets. Moreover, the incremental spending arising from the IDB health project amounts to less than 1% of GDP annually and amounts to 2.9% of GDP over the life of the Program. As the investments are primarily geared at the rehabilitation of structures, the additionality of recurrent costs generated by the Program is expected to be an insignificant percentage of the overall health budget, and is considered sustainable in the post E-HIPC environment.

Table IV-1. Social and Health Sector Spending

		Projections					
	2003	2004	2005	2006	2007	2008	2009
	(In percent of GDP; including IDB Project)						
Social sector spending 1/	**19.3**	**19.5**	**20.2**	**20.8**	**21.4**	**21.9**	**22.1**
Current	13.2	13.3	13.5	13.5	14.0	14.3	14.6
Capital	6.1	6.2	6.7	7.3	7.5	7.6	7.5
Health sector spending	4.0	4.1	4.3	4.6	4.9	5.3	5.3
Current	3.7	3.8	3.7	3.8	4.0	4.1	4.2
Personal emoluments	1.7	1.8	1.8	1.9	2.0	2.1	2.2
Other	2.0	2.0	1.9	1.9	2.0	2.0	2.0
Capital	0.3	0.3	0.6	0.8	1.0	1.2	1.1
IDB Project Related Spending	0.0	0.0	0.2	0.4	0.6	0.9	0.8
Local counterpart (current)	0.0	0.0	0.0	0.0	0.1	0.1	0.1
BID (capital)	0.0	0.0	0.2	0.4	0.6	0.8	0.7
Memo:							
Nominal GDP (MP in US$ millio	732.0	759.0	774.0	782.0	805.0	843.0	884.0

Sources: Guyanese authorities; and Fund and World Bank staffs estimates from Expenditure Tracking Mission, and IDB staff estimates.

Notes: 1/ Includes spending of the Education and Health Sectors, the Social Impact Amelioration Program, the Basic Needs Trust Fund, and housing and water sector expenditures, and estimates are based on HIPC targets and project expenditures.

4.12 However, given the current human resource constraints and emigration, labor market conditions are such that there is a significant risk of wage bill escalation in the health sector above general adjustment factors such as inflation and productivity gains.

D. SEQ/PTI Classification

4.13 This operation does qualify as a Social Equity Enhancing (SEQ) project, because it finances investment in the social (health) sector. The 1999 Guyana Living Condition Survey (GLCS) indicates that users of public health facilities are

predominantly poor. Of all ill persons reporting to have visited a public health clinic during the past 30 days of the survey, 54% were classified as poor according to the national absolute poverty line.[24] Moreover, specific investments, such as the human resource development subcomponent, will improve access to preventive and primary health care services in poor rural areas and to Amerindian communities. Thus, the operation as a whole qualifies as Poverty Targeted Investment (PTI).

E. Environmental impact

4.14 The Program will finance the replacement of old and inadequate facilities and equipment with more modern and efficient ones. Potential hazards are considered minor and predictable. To mitigate this risk, the design will consider cost-effective actions directed to improve safety, energy conservation and waste management (including hazardous/toxic solid wastes, biological wastes, and domestic sewage). In accordance with the norms and procedures construction permits will be granted on the basis of environmental management plans. Mandatory application of standard measures in project engineering will be specifies in the bidding documents. Thus, no negative environmental impacts are expected.

F. Risks

4.15 **Legal framework of the HMCs.** The *Ministry of Health Act* and *Regional Health Authorities Act* and their regulations will clearly define the duties, powers and authorities of MOH and HMCs as principal agents in the governance and delivery of health. The two pieces of legislation have been already drafted and approved by the relevant Cabinet subcommittee. However, the incompleteness of the HMC legal framework poses a risk to the execution of the Program. To mitigate such a risk, the GOG agreed to include as condition prior to loan first disbursement the enactment of the two pieces of legislations.

4.16 **Human resources retention.** Critical to strengthening the health sector is GOG's ability to attract and retain qualified human resources. GOG will address health sector workers' remuneration within the context of a sustainable government-wide public-sector modernization strategy. The Program will inform this process through: (i) the ongoing monitoring of health sector workers supply/demand; (ii) an increased focus on health care by outsourcing of non-core functions to the private sector; and (iii) the establishment of a sustainable program and incentives to attract and retain human resources in the health sector, particularly in rural areas.

4.17 **Soft and infrastructure investments.** Lessons learned from previous health sector reform program in the Region show that the execution of activities directed

[24] Analysis performed by the IDB Research Department. In the 1999 GSLC, the national absolute poverty line was set at G$7,639 per person per month, or US$1.40 per day.

to institutional capacity strengthening and reforms implementation (e.g. Components 1 of the proposed Program) are often slower than infrastructure investments. To mitigate this risk, the GOG has agreed to a number of conditions listed in ¶3.23-3.25, which will assure a balanced execution of the two components of the project.

4.18 **Absorptive capacity**. The main GOG institutions involved in project activities are weak, and absorptive capacity for new programs and initiatives is low. This situation constrains the execution of the Bank's portfolio, and is reflected in slow compliance with contractual conditions and the need for extensions of project execution and disbursement deadlines. The Program will mitigate this factor by exploring the possibility of contracting expatriate and external consultants to provide technical assistance, as well as focused institutional strengthening directed to transfer of knowledge to the local counterpart in MOH, in order to enhance the health sector's absorptive capacity in the short to medium term. Moreover, the project will seek the introduction of performance based incentives for key staff in the PIU, which is based on a model being developed by the COF/CGY for use in Bank's programs. Performance and retention incentives are also being developed for key health care workers. Finally, COF/CGY has achieved significant gains in portfolio execution starting in 2003 based on frequent monitoring of project policies, benchmarks and timelines.

4.19 **Procurement problems**. The execution of Bank projects has traditionally suffered delays because of the procurement system of the country. Until recently, procurement was governed by obsolete laws and regulations, while Central Tenders Board procedures are complex, lengthy, and conducted with minimum staff who utilize outdated manual record keeping. A new Procurement and Tender Bill, which seeks to better regulate procurement of goods and services and the execution of works, and to promote competition among suppliers and contractors was recently approved by the Parliament and is expected to be fully operational in 2004.

4.20 Policy and institutional developments in the area of procurement are being monitored by IMF conditionalities and supported by the WB's PSTAC with a view to implement the recommendations contained in the Country Procurement Assessment Report of 2002. The Minister of Finance has not yet issued the regulations pertaining to the new law of August 2003, or establish the National Procurement Administration Board, which will replace the Central Tenders Board. In addition, the Bank's Fiscal and Financial Management Program, whose approval is expected in the first half of 2004, will further the implementation of the Constitutionally mandated Public Procurement Commission. To mitigate risks during the transition period, a consultant has been hired to support the PIU in the procurement of goods and services.

HEALTH SECTOR PROGRAM (GY-0077)
LOGICAL FRAMEWORK[1]

Objectives	Indicators	Means of Verification	Assumptions
GOAL			
Improve the effectiveness, quality and equity in access to health services in Guyana	*By the end of project* • Reduce maternal mortality rate from 170 per 100,000 to 90 per 100,000. • Reduce by 15% inter-regional variation (standard deviation) in hospitalization rates for general medical services • Reduce by 15% inter-regional variation (standard deviation) in diagnostic services	• Hospital admissions records • Official document of the MOH	
PURPOSE			**FROM PURPOSE TO GOAL**
Improve the institutional capacity of the health sector and the health services delivery system.	*By the end of project* • Vaccination rate among children under 1 in regions 6 & 10 above 85% for all vaccines. • Provision of drugs and other medical health care supplies to health facilities within 1 week from requests increases from 50% to 85% • Fully staffed health care teams increased from 30% to 85%. • Improve bed occupancy at health facilities rationalized from 40% to 65%.	• MOH, RDG, GPHC and HMC records • Results of independent evaluation. • Results of pharmaceutical survey. • Records of material management unit and health facilities. • Hospital admissions records.	• Macroeconomic stability and economic growth maintained. • Improved water and sanitation standards. • Levels of public health expenditures maintained in real terms at the 2002 value.

[1] Indicators, targets and means of verification will be refined during the first year of project execution.

Objectives	Indicators	Means of Verification	Assumptions
COMPONENTS			**FROM COMPONENTS TO PURPOSE**
Component 1. Organizational and institutional capacity improvement 1.1 Institutional strengthening of the health system 1.1.1 Institutional and managerial reform successfully implemented 1.1.2 Acceptance of health sector organizational reform achieved 1.2 Human resource development 1.2.1 Develop workforce planning capacity and human resource management structures 1.2.2 Modernize the recruitment process for all health sector employees 1.2.3 Modernize and expand training programs for CHW, nurses, and Medex 1.2.4 Financial and non-financial incentives to attract and retain human resources developed 1.3 Health management information system improvement 1.3.1 Health information system and IT capacity strengthened	*By the end of project* 1.1.1.A Legislation regulated, policy being planned and monitoring and evaluation of programs being conducted by the MOH. 1.1.1.B Service Agreements (MOH-HMC, MOH-MMU, MOH-GPHC) in operation. 1.1.2.A Change management coaching program implemented 1.1.2.B Workshop disseminating the new health sector organization conducted in all 10 Regions 1.1.2.C National awareness campaign implemented 1.2.1 Database, Succession, Manpower and Work force Plans in place. 1.2.2 Transparent interview, selection and due process recruitment of human resources in place 1.2.3 500 CHW, 200 nurses and 100 Medex trained 1.2.4 Pilot target incentive scheme for primary care team implemented and evaluated. 1.3.1 Information system based on family health cards covers 80% of population in Region 6 and 10	• Publication in official gazette or equivalent. • MOH-MMU, GPHC and HMC records • Mid-term and final evaluation • Pharmaceutical survey. • Official document of the MOH.	• Decision-makers use information collected and analyzed by the MOH, HMCs and GPHC effectively. • Health sector organizational reform accepted by the population and politically viable • Community involvement in monitoring contributes to a more equitable allocation of resources. • Turnover rates of trained staff in MOH, RHC, GPHC will not affect sustainability of the project. • Incentives have expected effects on provider behavior. • Training effective in improving effectiveness of provider practices. • Migration flows of medical and nursing personnel stabilize. • Adequate levels of preparation of staff such that training is effective.

Objectives	Indicators	Means of Verification	Assumptions
1.3.2 Routine Maintenance Management System (RMMS) for health infrastructure and equipment implemented. 1.4 <u>Strengthening of the pharmaceutical system</u> 1.4.1 Access to essential drugs improved	1.3.2 80% of budget allocation for health infrastructure and equipment maintenance is carried out according to the RMMS 1.4.1 Availability at health facility of tracer essential drugs improved from 50% to 80%.		
Component 2. Health service delivery improvement: 2.1 Health facilities redeveloped according to the prioritization study. 2.2 Hospital beds rationalized as per rationalization plan. 2.3 District Hospitals converted into lower level facilities as per rationalization plan.	*By the end of project* 2.1 McKenzie Regional Hospital; GPHC inpatient wards; electric, water and sewage system at the GPHC compound rehabilitated and upgraded 2.2 Total number of hospital beds reduced from 1,631 to 1,150 2.3 10 District Health Hospitals converted into cottage hospitals of health center	• MOH, records • Independent evaluation. • Official document of the MOH. • Results of consumer survey on the quality and acceptance of care provided	• The rationalization plan is accepted by the population and its implementation politically viable • No significant change in demand for health service
ACTIVITIES			
Component 1 Technical Assistance Training and workshops Equipments **Component 2** Technical Design Equipments Civil Work	 US$4.5 million US$1 million US$1 million US$1.2 million US$3 million US$12.5 million	• Loan Management System • Reports from Executing agency	

HEALTH SECTOR PROGRAM
(GY-0077)
Tentative Procurement Plan

Main Procurement Needs of the Project	Financing Sources		Procurement Method	Pre qualification Yes/No	Tentative Publication date	Estimated Amount	Number of lot
	IDB (%)	Local (%)					
A. Procurement of Services							
Consulting Firm: Architectural design and supervision	100	-	ICB	Yes	June 2004	1,200,000 (1)	1
Individual consultant: Regional Health Services Planning	100	-	Short Listing	No	April 2004	100,000 (1)	1
Individual consultant: Procurement Specialist	100	-	Short Listing	No	April 2004	50,000 (1)	1
Individual consultant: Legislation Specialist	100	-	Short Listing	No	April 2004	50,000 (1)	1
Individual consultant: Managerial Support of the Chief Executive Office	100	-	Short Listing	No	April 2004	25,000 (1)	1
Individual consultant: Facility Management Specialist	100	-	Short Listing	No	April 2004	25,000 (1)	1
Individual consultant: Financial Specialist	100	-	Short Listing	No	April 2004	25,000 (1)	1
Individual consultant: Health Services Specialist	100	-	Short Listing	No	April 2004	25,000 (1)	1
Individual consultant: Human Resources Specialist	100	-	Short Listing	No	April 2004	25,000 (1)	1
International Consulting Firm: Technical Assistance for the implementation of Component 1	92	8	ICB	Yes	July 2004	4,000,000	1
Auditing Firm	100	-	Short Listing	No	July 2004	200,000	1
International Consultant: Monitoring & Evaluation Specialist	87	13	Short Listing	No	July2004	300,000	1
B. Civil Works							
International Construction Firms	87	13	ICB	Yes	July2005	12,639,000	3
C. Goods							
International Hospital Equipment Supplier	87	13	ICB	Yes	July 2005	3,000,000	3
Local IT Providers	100	-	ILS	No	January 2005	1,000,000	2

ICB: International Competitive Bidding; NCB: National Competitive Bidding; LIB: Limited International Bidding; DC: Direct Contracting; ILS: International/Local Shopping; FA: Force Account

(1): financed by the PPEF